

## CLAIMS

## Claims 1 and 2 (canceled)

3. A thermostat built on a base, said base having provisions for wall mounting, leveling and electrical connections, said thermostat further comprising a temperature sensitive bimetal spiral and a humidity-sensitive paper-like material laminated to a curved spring-metal strip, responses of said temperature and humidity sensitive elements being physically combined to give a single rotation to a tilt-type three-contact mercury switch mounted on outside end of said bimetal spiral, said thermostat embodying a single resistance heater for said bi-metal spiral as a means to overcome a "dead zone" in motion of said mercury switch, said single heater being directly adjacent to said bimetal spiral without touching said spiral, heat from said resistance heater being adjustable by a variable resistor in series with said resistance heater, said series resistors being supplied by thermostat voltage, said variable resistor using a single heat setting for both heating and cooling modes independent of external air conditioning or furnace relay-coil resistance, said bi-metal spiral having its inside end joined to a hub, said humidity sensitive strip being removably joined to a hub, said hubs being joined together in an alignment-adjustable friction fit on a common shaft, opposite end of said humidity element being guide-slot attached to an operating lever by a friction adjustable slot angle, said operating lever pivoting about a center common to said hub of said bi-metal spiral and to said hub of said humidity sensitive strip, said operating lever embodying a set point indicator, said operating lever serving as an inboard bearing for said shaft, a "U" shaped structure attached to said base provides an out board bearing for said shaft, said base further embodying wiring and operating mode selection switches for heating, air conditioning, fan operation, and also for said variable resistor, said wiring further providing terminal connections to said heating, air conditioning and fan equipment and a common power source, said thermostat further comprising a protective cover, said cover further comprising a thermometer and a set point scale.